



## *Roadside Emissions Survey*

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**T**he California Department of Consumer Affairs/Bureau of Automotive Repair (DCA/BAR) and Highway Patrol (CHP) conduct the state's roadside vehicle emissions survey. The survey's purpose is to provide a "real world" profile of the emissions from California's cars and trucks. The data are used to develop a baseline of statewide vehicle emissions levels, which is then used to help gauge the success of the state's Smog Check program. In addition, the survey is necessary to demonstrate to the U.S. Environmental Protection Agency that California's Smog Check program meets federal emissions reduction requirements. The study also evaluates various emissions testing procedures. California motorists have been participating in state-operated roadside emissions surveys since 1976.

The 1997 phase of roadside tests is currently underway. It is conducted by two teams, one in northern California and one in southern California, who will together visit over one hundred surface street locations statewide until the end of the year. The precise locations and dates of the tests are confidential in order to protect the scientific integrity of the data gathering. The sites are chosen by first randomly selecting ZIP codes and then determining sites that are safe for conducting the tests.

At each site, one lane of traffic is coned off to accommodate the testing equipment. A CHP cruiser is stationed in the coned-off inspection lane, and a uniformed officer directs randomly-selected vehicles to that lane.

Motorists whose vehicles are selected for testing are greeted by a BAR representative who provides them with information about the survey's purpose and answers any questions they might have. The BAR representative will do everything possible to accommodate special circumstances, but motorist participation is vital to the study's success.

Vehicles are tested solely for the purpose of gathering data. They do not "pass" or "fail" the emissions tests, so these tests add no additional repair requirements for drivers of high-polluting vehicles. The procedure usually lasts less than 10 minutes. The emissions survey tests vehicles on a treadmill-like device called a dynamometer that eventually will be used for Smog Checks in the state's smoggiest regions. Dynamometers currently provide the most accurate emissions readings for hydrocarbons, carbon monoxide, and oxides of nitrogen (NO<sub>x</sub>) by simulating actual driving conditions. For advisory purposes at the conclusion of each test, the car's driver receives a Vehicle Inspection Report detailing the results. The report may **not** be substituted for a vehicle's official Smog Check.

In some locations, vehicles will also pass by a Remote Sensing Device (RSD), which uses infrared technology to measure vehicle emissions. The data gathered from the RSDs at these sites are also used solely for scientific purposes. RSDs eventually will be used throughout the state to identify high-polluting vehicles.